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DAN EARNETT
CHIEF OF STAFF

175108

August 10, 2005

VIA HAND DELIVERY

Charles L.A. Terreni, Esquire
Chief Clerk/Administrator
South Carolina Public Service Commission
101 Executive Center Dr., Suite 100
Columbia, SC 29210

RE: Duke Power- Annual Review of Base Rates For Fuel Costs
Docket No.: 2005-3-E

Dear Mr. Terreni:

Enclosed for filing please find the original and twenty-five (25) copies of the Direct Testimony and Exhibits of Jacqueline R. Cherry and A.R. Watts in the above referenced matter. Please date stamp the extra copy enclosed and return it to me via our courier.

Also, we have served same on all parties of record and enclose a Certificate of Service to that effect.

Please let me know if you have any questions.

Sincerely,


C. Lessie Hammonds

CLH/rng
Enclosures

cc: Lara Simmons Nichols, Esquire (w/enclosures)
Richard L. Whitt, Esquire (w/enclosures)
Scott Elliott, Esquire (w/enclosures)

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2005-3-E

IN RE:

Duke Power – Annual Review of)
Base Rates for Fuel Costs)
)
_____)


CERTIFICATE OF SERVICE

This is to certify that I, Rena Grant, an employee with the Office of Regulatory Staff, have this date served one (1) copy of the **Direct Testimony & Exhibits of Jacqueline R. Cherry and A.R. Watts** in the above-referenced matter to the person(s) named below by causing said copy to be deposited in the United States Postal Service, first class postage prepaid and affixed thereto, and addressed as shown below:

Lara Simmons Nichols, Assistant General Counsel
Duke Energy Corporation
Post Office Box 1244 (PB05E)
Charlotte, NC 28201

Richard L. Whitt, Esquire
Austin, Lewis & Rogers, P.A.
Post Office Box 11716
Columbia, SC 29211

Scott Elliott, Esquire
Elliott & Elliott, P.A.
721 Olive Street
Columbia, SC 29205



Rena Grant

August 10, 2005
Columbia, South Carolina

THE OFFICE OF REGULATORY STAFF
DIRECT TESTIMONY AND EXHIBITS
OF
A.R. WATTS



Docket No. 2005-3-E

**Duke Power Company – Annual Review of Base
Rates for Fuel Costs**

DIRECT TESTIMONY OF**A.R. WATTS****ON BEHALF OF****THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF****DOCKET NO. 2005-3-E****Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.**

A. My name is A.R. "Randy" Watts. My business address is 1441 Main Street, Suite 300, Columbia, South Carolina 29201. I am employed by the State of South Carolina as Program Manager of the Electric Department for the Office of Regulatory Staff ("ORS").

Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A. I received a Bachelor of Science Degree in Electrical Engineering from the University of South Carolina in Columbia in 1976. I was employed at that time by the Public Service Commission of South Carolina ("Commission") as a Utilities Engineer in the Electric Department and was promoted to Chief of the Electric Department in August 1981. Subsequent to internal Commission restructuring, my position was designated Chief of Electric in October 1999. I remained in that role until transferring to my current position with the Office of Regulatory Staff in January 2005. I have testified on numerous occasions before this Commission in conjunction with fuel clause, territorial assignment, Siting Act, complaint and general rate proceedings.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to set forth the Office of Regulatory Staff findings and recommendations resulting from our examination of Duke Power Company's ("Duke" or "Company") fuel expenses and power plant operations used in

1 the generation of electricity to meet the Company's South Carolina retail customer
2 requirements.

3 **Q. WHAT AREAS WERE ENCOMPASSED IN YOUR REVIEW OF THE**
4 **COMPANY'S FUEL EXPENSES AND PLANT OPERATIONS?**

5 **A.** First, ORS reviewed the Company's responses to ORS's Data Request containing
6 thirty-eight questions. In preparation for this proceeding ORS reviewed the Company's
7 monthly fuel reports including power plant performance data, major unit outages, and
8 generation statistics. Comparisons and analysis of actual to original estimates were
9 performed for both megawatt-hour sales and fuel costs. ORS analyzed the Company's
10 fuel cost projections and reviewed the Adjustment for Fuel Costs tariff.

11 **Q. WHAT ADDITIONAL STEPS WERE TAKEN IN ORS'S REVIEW OF THE**
12 **COMPANY'S PROPOSAL IN THIS PROCEEDING?**

13 **A.** ORS met with various Duke personnel representing a variety of areas of expertise
14 including fuel procurement and transportation, nuclear plant operations, fossil and hydro
15 generation, plant dispatch, and forecast and resource planning to discuss the Company's
16 procurement activities and policies, plant performance and operations, and forecasting
17 methodologies and practices. In addition, ORS met with Company financial personnel to
18 discuss Duke's proposal to flow the revenue requirement related to an excess deferred
19 income tax liability to the Company's South Carolina retail customers in this proceeding.

20 Also, on a daily basis, ORS keeps abreast of the coal industry including
21 transportation through industry and governmental publications regarding activities in the
22 coal and related markets.

1 **Q. DID ORS EXAMINE THE COMPANY'S PLANT OPERATIONS FOR THE**
2 **REVIEW PERIOD?**

3 **A.** Yes. ORS reviewed the Company's operation of its generating facilities, with
4 special attention to the nuclear plant operations, to determine if the Company made
5 reasonable efforts to minimize fuel costs. The review period includes the historical time
6 from April 2004 through June 2005 and the projected time from July 2005 through
7 September 2006. The review period was modified from the previous twelve months to
8 accommodate the need for judicial economy. As shown by Exhibit ARW-1, ORS
9 reviewed the availability of the Company's major power plants. Page one of this Exhibit
10 shows the monthly availability of the Company's generating units stated in percentages.
11 The capacity factors on page two indicate the monthly utilization of each of the seven
12 nuclear units in producing power.

13 **Q. PLEASE EXPLAIN THE SIGNIFICANCE OF PLANT AVAILABILITY AND**
14 **HOW IT IS USED IN YOUR EVALUATION AS REPRESENTED ON YOUR**
15 **EXHIBIT ARW-2.**

16 **A.** Exhibits ARW-2 shows the Company's major Fossil and Nuclear Units summary
17 of outages for the review period. Generation Units with zero availability as well as those
18 units having months with less than 100% availability led us to investigate the reasons for
19 such occurrences. As shown on Exhibit ARW-2, ORS obtained and summarized
20 information from Company outage reports explaining the various reasons for the level of
21 availability or outages. As an example, Exhibit ARW-1, page 1 of 2 shows Oconee Unit
22 2 had zero availability in April and May 2004, and Exhibit ARW-2, page 3 of 3 provides

1 the explanation for the unavailability of the plant. The unit was off line for major
2 activities including refueling as well as steam generator and reactor head replacements.

3 **Q. WOULD YOU EXPLAIN HOW THE OTHER OUTAGES ARE REPRESENTED**
4 **ON EXHIBIT ARW-2?**

5 **A.** Yes. Exhibit ARW-2 provides explanations for major fossil unit outages in
6 excess of 100 hours, as well as all nuclear plant outages during the review period.
7 Although not included in this exhibit, fossil outages of less than 100 hours were also
8 reviewed and found to be reasonable by ORS.

9 **Q. PLEASE ADDRESS THE OUTAGES AT THE COMPANY'S THREE NUCLEAR**
10 **STATIONS.**

11 **A.** Exhibit ARW-2 (pages 2 and 3) shows the duration of the outages at the
12 Company's three nuclear stations by unit along with the cause and corrective action to
13 restore each to service. ORS found that the Company took appropriate corrective action
14 with respect to these outages, and there were no Nuclear Regulatory Commission
15 ("NRC") fines associated with these outages. The seven units combined achieved an
16 overall 90.4% capacity factor for the review period which included full or partial
17 refueling outages at all the units as well as replacement of the steam generator at two
18 units and reactor head replacement at one unit.

19 **Q. WHAT WERE THE RESULTS OF YOUR ANALYSIS OF THE COMPANY'S**
20 **PLANT OPERATIONS FOR THE PERIOD UNDER REVIEW?**

21 **A.** ORS's review of the Company's operation of its generating facilities resulted in
22 our conclusion that the Company made reasonable efforts to maximize unit availability
23 and minimize fuel costs.

1 **Q. DID ORS REVIEW THE GENERATION MIX AND BASE UNIT FUEL COSTS**
2 **UTILIZED BY THE COMPANY DURING THE REVIEW PERIOD?**

3 **A.** Yes. Exhibit ARW-3 shows the generation mix for the review period by
4 generation type. The Company has no combined-cycle gas-fired generating units in its
5 fleet and uses its simple-cycle combustion turbine units sparingly during peaking periods
6 or when capacity is short and purchase opportunities are not economical. The
7 Company's load is mainly met through comparable portions of nuclear and fossil (coal)
8 generation along with a small amount of hydro production.

9 In addition, Exhibit ARW-4 shows the average fuel cost in cents per KWH to
10 operate, and generation in MWHs for the Company's base load nuclear and coal-fired
11 facilities. The Catawba Station had the least expensive average fuel cost at 0.38 cents per
12 KWH. Cliffside 5 had the most expensive fuel cost at 2.20 cents per KWH. The highest
13 total generation of 23,876, 347 MWHs, was produced at the Oconee Nuclear Station.

14 **Q. HAS ORS REVIEWED THE ACCURACY OF THE COMPANY'S FORECAST?**

15 **A.** Yes. As shown in Exhibit ARW-5, the Company's actual megawatt-hour sales
16 versus forecasted sales varied by only 1.05% during the review period. In addition,
17 Exhibit ARW-6 shows the monthly variance between projected and actual fuel cost
18 factors. This Exhibit demonstrates that the Company was able to improve its forecasted
19 costs during all but two months of the fifteen month review period.

20 **Q. DID ORS REVIEW ADDITIONAL INFORMATION DETERMINING THE**
21 **REASONABLENESS OF THE COMPANY'S FORECAST?**

22 **A.** Yes. ORS reviewed the forecasted maintenance schedules for the Company's
23 major generating units as well as the Company's fuel price forecast for nuclear and coal.

1 ORS also reviewed the Company's load forecasting and ensuing dispatch procedures.

2 Based on the review, ORS believes Duke's forecast is reasonable and appropriate.

3 **Q. WHAT OTHER INFORMATION HAS ORS REVIEWED IN MAKING ITS**
4 **DETERMINATIONS IN THIS PROCEEDING?**

5 **A.**Exhibit ARW-7 shows the ending balances of over and under collections of fuel
6 costs beginning November 1979. The Company has experienced both over and under
7 recovery balances throughout the approximate twenty-five year period.

8 **Q. WHAT OTHER SOURCES OF INFORMATION DOES ORS USE IN**
9 **DETERMINING THE REASONABLENESS OF A UTILITY'S REQUEST FOR A**
10 **FUEL COST COMPONENT?**

11 **A.**ORS routinely 1) reviews private and public industry publications as well as those
12 available on the Energy Information Administration's ("EIA") website; 2) conducts
13 meetings with Company personnel; 3) conducts meetings with representatives of large
14 industrial energy consumers; 4) attends industry conferences; and 5) reviews information
15 as filed monthly by electric generating utilities on Form 423 with the Federal Energy
16 Regulatory Commission. An example of EIA data reviewed is included on Exhibit
17 ARW-8, which provides spot coal price data for a three year period and includes the most
18 recent upward trend of the average weekly coal commodity spot process for Central
19 Appalachia beginning in late 2003 then leveling off in the \$60 to \$65 per ton range from
20 mid 2004 to mid 2005. Duke generally obtains its coal from the Central Appalachia
21 region.

1 **Q. DOES ORS HAVE A RECOMMENDATION REGARDING THE COMPANY'S**
2 **PROPOSAL TO FLOW THE REVENUE REQUIREMENT RELATED TO AN**
3 **EXCESS DEFERRED TAX LIABILITY TO SOUTH CAROLINA CUSTOMERS**
4 **IN THIS PROCEEDING?**

5 **A.**Yes. ORS acknowledges that the dollars associated with this request are not fuel
6 or fuel related; therefore, the revenue could not be considered appropriate for inclusion in
7 fuel cost nor the actual approved fuel component for the Company. However, ORS is of
8 the opinion that these funds should be flowed back or credited to the Company's South
9 Carolina retail ratepayers in an appropriate and efficient manner. Therefore, ORS
10 recommends a separate decrement of 0.1732 cents per kilowatt-hour be put in place to be
11 effective and coincide with the Company's approved fuel component for the period
12 October 2005 through September 2006. This decrement would be eliminated from South
13 Carolina retail rates effective at the end of the fuel billing period in September 2006.
14 ORS recommends that Duke institute appropriate accounting procedures in order to
15 maintain fuel expenses and revenues separate and distinguishable from monies
16 attributable to this decrement.

17 **Q. DOES ORS HAVE A RECOMMENDATION FOR THE FUEL COMPONENT IN**
18 **THIS PROCEEDING?**

19 **A.**Yes. ORS recommends the fuel component in this proceeding be set at
20 1.5802 cents per kilowatt-hour for the period October 2005 through September 2006.

21 Incorporating the flow-back or decrement of the 0.1732 cents per kilowatt-hour
22 during the effective period of the fuel component (October 2005 – September 2006) will
23 produce a net billing increase of 0.257 cents per kilowatt-hour from the currently

1 approved 1.1500 factor. The resulting net billing component is 1.4070 (1.5802 – 0.1732)
2 cents per kilowatt-hour.

3 **Q. PLEASE EXPLAIN THE BASIS FOR YOUR PROPOSED BASE FUEL LEVEL**
4 **COMPONENT.**

5 **A.** Our analysis indicates the major driver for the upward pressure on fuel costs is the
6 significant increases in delivered cost of coal. In addition, the level of under-recovery in
7 the cumulative account balance provides additional pressure to increase the base fuel
8 level. Another contributing factor was the Company's prior fuel review hearing
9 commenced at the early stages of these unprecedented coal and transportation cost
10 increases which caused the exclusion of this element in the projections for this review
11 period. Another contributor was the extension of the review period in order to allow
12 more time for analysis and review of the issues, which resulted in the previously
13 approved lower base fuel level remaining in effect for a longer period of time.

14 The ORS Auditing Department verified and provided the cumulative recovery
15 account balance as of June 2005 showing an under-recovered balance of \$2,669,646 as
16 reflected on ORS Audit Exhibit JRC-7. This Audit Department adjusted balance is also
17 reflected on Exhibit ARW-7.

18 **Q. DO YOU HAVE A RECOMMENDATION REGARDING THE COMPANY'S**
19 **ADJUSTMENT FOR FUEL COSTS TARIFF?**

20 **A.** Yes. Exhibit ARW-9 is the Company's currently approved Adjustment for Fuel
21 Costs tariff, which does not reflect the current language in the latest version of the fuel
22 cost statute which was modified during the 2004 Legislative session. ORS proposes the

1 following language be substituted for paragraphs (B) and (C) in lieu of the Company's
2 currently approved wording.

3 (B) Fuel costs related to purchased power (and applicable SO2 emission
4 allowances) such as those incurred in unit power and limited term
5 power purchases where the fossil fuel costs and applicable SO2
6 emission allowances associated with energy purchased are identifiable
7 and are identified in the billing statement. Also the cost of 'firm
8 generation capacity purchases' which are defined as purchases made
9 to cure a capacity deficiency or to maintain adequate reserve levels.
10 "Costs of firm generation capacity purchases" include the total
11 delivered costs of firm generation capacity purchased and excludes
12 generation capacity reservation charges, generation capacity option
13 charges and any other generation capacity charges.

14 (C) Fuel costs related to purchased power (including transmission charges
15 and applicable SO2 emission allowances), such as short term,
16 economy and other such purchases, where the energy is purchased on
17 an economic dispatch basis, including the total delivered cost of
18 economy purchases of electric power defined as purchases made to
19 displace higher cost generation at a cost which is less than the
20 purchasing utility's avoided variable costs for the generation of an
21 equivalent quantity of electric power.

1 **Energy receipts that do not involve money payments such as Diversity**
2 **energy and payback of storage energy are not defined as purchased or**
3 **interchange power relative to this fuel calculation.**

4 ORS recommends this revised/updated language for approval by the Commission
5 to more accurately reflect the content in the statute.

6 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

7 **A. Yes, it does.**

**SOUTH CAROLINA
OFFICE OF REGULATORY STAFF**

**DUKE POWER COMPANY
ANNUAL REVIEW OF BASE RATES FOR FUEL COST
ACTUAL REVIEW PERIOD: APRIL, 2004 – JUNE, 2005**

DOCKET NO. 2005-3-E

A. RANDY WATTS TESTIMONY

EXHIBIT INDEX

<u>EXHIBIT NO.</u>	<u>EXHIBIT TYPE</u>	<u>PREPARED BY</u>
---------------------------	----------------------------	---------------------------

ARW-1	Power Plant Performance Data Report – Availability/Capacity Factors	ORS
ARW-2	Fossil/Nuclear Unit Outage Report (100 Hrs. or Greater Duration) for Duke Power Company	ORS
ARW-3	Generation Mix Report (April 2004 – June 2005) for Duke Power Company	ORS
ARW-4	Generation Statistics for Major Plants (April 2004 – June 2005) for Duke Power Company	ORS
ARW-5	SC Retail Comparison of Estimated to Actual Energy Sales for Duke Power Company	ORS
ARW-6	SC Retail Comparison of Estimated to Actual Fuel Cost for Duke Power Company	ORS
ARW-7	History of Cumulative Recovery Account Report for Duke Power Company	ORS
ARW-8	Average Weekly Coal Commodity Spot Prices	Platts Coal Outlook (From EIA website)
ARW-9	Adjustment for Fuel Costs tariff	ORS

South Carolina
Office of Regulatory Staff
Power Plant Performance Data Report
Availability Factors (Percentage)
for Duke Power Company

PLANT	MW RATING	APR 2004	MAY 2004	JUN 2004	JUL 2004	AUG 2004	SEP 2004	OCT 2004	NOV 2004	DEC 2004	JAN 2005	FEB 2005	MAR 2005	APR 2005	MAY 2005	JUN 2005
CATAWBA 1	1129	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.5	95.3	100.0	100.0	100.0	100.0	20.0	81.0
CATAWBA 2	1129	100.0	100.0	100.0	100.0	100.0	34.0	17.3	97.4	100.0	100.0	100.0	100.0	100.0	96.9	100.0
MCGUIRE 1	1100	62.6	100.0	100.0	100.0	100.0	100.0	55.5	66.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MCGUIRE 2	1100	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	2.1	38.6	100.0	100.0
OCONEE 1	846	100.0	100.0	100.0	100.0	100.0	92.7	100.0	100.0	100.0	100.0	100.0	100.0	26.6	52.6	100.0
OCONEE 2	846	0.0	0.0	47.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
OCONEE 3	846	98.1	100.0	100.0	100.0	100.0	100.0	25.9	0.0	0.0	90.3	80.3	100.0	100.0	100.0	100.0
NUCLEAR TOT	6996	80.1	85.7	92.4	100.0	100.0	89.5	71.2	80.0	85.0	98.6	97.2	86.0	80.7	81.4	97.3
BELEWS CRK 1	1135	89.3	25.1	0.0	86.7	92.1	64.6	93.0	87.7	91.6	98.0	97.0	99.8	6.8	50.1	99.5
BELEWS CRK 2	1135	49.3	91.7	100.0	99.7	43.5	63.5	99.6	92.6	93.8	74.3	97.2	14.5	99.6	85.7	93.7
CLIFFSIDE 5	562	49.5	97.9	80.6	91.8	93.0	93.1	95.4	83.5	100.0	98.2	37.4	87.2	99.7	99.6	99.1
MARSHALL 3	670	99.9	99.5	91.1	99.9	91.8	98.3	95.1	62.5	93.7	99.7	98.8	79.5	89.0	93.3	99.7
MARSHALL 4	670	99.5	73.8	99.1	94.6	99.9	76.3	28.2	92.8	99.8	99.7	99.1	99.4	94.7	73.3	99.7
FOSSIL TOTALS	4172	77.5	77.6	74.2	94.5	84.1	79.2	82.3	83.8	95.8	94.0	85.9	76.1	78.0	80.4	98.3

South Carolina
Office of Regulatory Staff
Power Plant Performance Data Report
Capacity Factors (Percentage)
for Duke Power Company

PLANT	MW RATING	LIFE TIME	YEAR 2003	YEAR 2004	APR 2004	MAY 2004	JUN 2004	JUL 2004	AUG 2004	SEP 2004	OCT 2004	NOV 2004	DEC 2004	JAN 2005	FEB 2005	MAR 2004	APR 2005	MAY 2005	JUN 2005	Avg. Review Pd
CATAWBA 1	1129	81.1	83.0	97.9	103.0	97.8	101.5	101.3	98.0	101.6	102.0	97.4	97.6	94.0	103.3	103.2	102.9	19.4	78.7	93.4
CATAWBA 2	1129	91.9	94.0	89.1	103.2	102.4	101.8	101.7	101.9	33.3	12.0	99.2	103.4	103.5	103.7	103.6	103.1	97.4	101.6	91.5
MCGUIRE 1	1100	73.9	103.0	85.3	61.1	103.9	102.2	101.3	101.3	101.9	55.7	64.7	105.1	105.3	105.1	105.0	104.6	103.9	103.0	94.9
MCGUIRE 2	1100	81.4	94.0	103.4	104.3	103.7	102.3	101.3	101.0	102.0	103.3	104.0	104.6	105.0	105.0	1.4	30.6	104.4	103.6	91.8
OCONEE 1	846	74.5	71.0	97.7	102.1	101.8	100.5	100.8	100.2	91.4	100.8	101.3	101.8	101.8	102.0	101.9	26.5	50.8	101.5	92.3
OCONEE 2	846	76.8	102.0	76.3	0.0	0.0	41.8	102.2	101.6	101.5	101.9	102.8	102.7	103.4	103.2	103.6	103.3	102.7	102.7	84.9
OCONEE 3	846	76.1	85.0	77.2	98.9	102.5	102.2	101.5	100.7	100.8	25.2	0.0	0.0	89.5	80.1	103.8	103.1	103.5	101.5	80.9
NUCLEAR TOT	6996	77.7	90.7	90.2	83.6	89.7	94.5	101.4	100.6	89.3	71.0	82.9	90.1	100.6	100.9	87.5	82.7	82.7	98.5	90.4

**South Carolina
Office of Regulatory Staff
Major Fossil Unit Outage Report
(100 Hrs or Greater Duration)
for Duke Power Company**

**EXHIBIT ARW-2
Page 1 of 3**

UNIT	DATE OFF	DATE ON	HOURS	TYPE	REASON FOR OUTAGE	CORRECTIVE ACTION
Belews Creek 1	05/08/04	05/24/04	401.6	Scheduled	SCR Outage	N/A
Belews Creek 1	05/26/04	07/04/04	938.1	Forced	Fire in secondary air preheater (SAH)	Repaired SAH, baskets and instituted enhanced corrective procedures.
Belews Creek 1	09/04/04	09/14/04	227.2	Forced	HP exciter malfunction	Repaired equipment and returned unit to service
Belews Creek 1	04/03/05	05/05/05	772.9	Scheduled	Secondary Air Preheater Outage	N/A
Belews Creek 1	05/05/05	05/12/05	164.3	Forced	Boiler water wall tube leaks found during startup	Repaired tube leaks and returned unit to service
Belews Creek 2	04/16/04	04/30/04	334.9	Scheduled	Spring Outage	N/A
Belews Creek 2	08/05/04	08/16/04	245.5	Forced	Turbine reheat stop valve failure	Stop valve repaired and returned to service
Belews Creek 2	09/17/04	09/27/04	243.3	Forced	Generator vibration	Repaired line fault cause of vibration
Belews Creek 2	01/01/05	01/05/05	108.7	Forced	Boiler Tube Leak	Boiler tube leak repaired
Belews Creek 2	03/05/05	03/29/05	581.7	Scheduled	Spring Outage	N/A
Cliffside 5	04/03/04	04/16/04	332.1	Scheduled	WDPF Upgrade	N/A
Cliffside 5	02/11/05	03/04/05	489.5	Scheduled	Maintenance Outage	N/A
Marshall 3	11/12/04	11/22/04	221.6	Scheduled	Fall Outage	N/A
Marshall 3	03/25/05	04/04/05	219.1	Scheduled	Spring Outage	N/A
Marshall 4	05/01/04	05/08/04	189.4	Scheduled	Spring Outage	N/A
Marshall 4	09/25/04	10/23/04	673.0	Scheduled	Fall Outage	N/A
Marshall 4	04/30/05	05/08/05	208.9	Scheduled	Spring Outage	N/A

**South Carolina
Office of Regulatory Staff
Nuclear Unit Outage Report
for Duke Power Company**

UNIT	DATE OFF	DATE ON	HOURS	TYPE	REASON FOR OUTAGE	CORRECTIVE ACTION
Catawba 1	11/13/2004	11/14/2004	24.90	Forced	Main turbine control system manual voltage regulator malfunction	Replaced defective voltage regulator motor Inspected all Unit 1 and Unit 2 micro-switch positions, and adjusted or replaced the switch mechanisms as necessary
Catawba 1	12/5/2004	12/7/2004	34.73	Forced	Reactor/turbine trip due to high level in 1B moisture separator reheater	N/A
Catawba 1	5/7/2005	6/6/2005	731.65	Scheduled	Refueling Outage	N/A
Catawba 2	9/11/2004	10/25/2004	1047.74	Scheduled	Refueling Outage extended to test steam generator	N/A
Catawba 2	10/28/2004	10/29/2004	43.60	Forced	Bank D control rods dropped into core	Replaced suspect circuit card
Catawba 2	11/9/2004	11/10/2004	18.82	Forced	Turbine control oil leak at #1 intercept valve	Replaced entire solenoid valve and associated failed O-ring
Catawba 2	5/11/2005	5/12/2005	22.77	Forced	Turbine valve control oil leak	Replaced solenoid valve and O-ring
McGuire 1	3/6/2004	4/12/2004	887.46	Scheduled	Refueling Outage extended to test steam generator, clean containment building, and repair main steam isolation valve	N/A
McGuire 1	10/18/2004	11/11/2004	573.00	Forced	1B steam generator instrument line leak - Outage extended due to main steam isolation valve malfunction (MSIV)	Repaired line and rebuilt, adjusted and tested MSIV

**South Carolina
Office of Regulatory Staff
Nuclear Unit Outage Report
for Duke Power Company**

UNIT	DATE OFF	DATE ON	HOURS	TYPE	REASON FOR OUTAGE	CORRECTIVE ACTION
McGuire 2	3/1/2005	3/5/2005	85.25	Forced	Drain line to feedwater heater rupture	Replaced section of piping
McGuire 2	3/5/2005	4/14/2005	959.19	Scheduled	Refueling Outage extended to repair turbine FW pump	N/A
McGuire 2	4/15/2005	4/21/2005	125.09	Forced	Steam generator FW regulator valve malfunction	Repaired FW regulator valve
Oconee 1	9/4/2004	9/6/2004	52.43	Scheduled	Inspection of heater drain piping	N/A
Oconee 1	4/8/2005	5/15/2005	880.58	Scheduled	Refueling Outage	N/A
Oconee 2	3/20/2004	6/15/2004	2087.20	Scheduled	Refueling Outage plus Steam Generator and Reactor Head replacement. Outage extended due to cooling unit fan assembly failure and low bearing oil pressure	N/A
Oconee 2	6/26/2004	6/27/2004	43.95	Scheduled	Oil pump discharge check valve malfunction	Valved repaired
Oconee 3	4/24/2004	4/24/2004	13.95	Forced	Turbine vibration	Balanced Turbine
Oconee 3	10/9/2004	1/4/2005	2088.56	Scheduled	Refueling Outage plus Steam Generator replacement	N/A
Oconee 3	2/17/2005	2/22/2005	132.28	Forced	Main steam line pressure transmitter impulse line leak	Replaced failed instrument tubing

South Carolina
Office of Regulatory Staff
Generation Mix Report (April 2004 – June 2005)
for Duke Power Company

<u>MONTH</u>	<u>PERCENTAGE</u>		
	<u>FOSSIL</u>	<u>NUCLEAR</u>	<u>HYDRO</u>
2004			
April	44.4	55.0	0.6
May	45.0	55.0	0.0
June	44.2	55.5	0.3
July	45.2	54.3	0.5
August	43.3	56.6	0.1
September	39.1	57.4	3.5
October	46.6	51.7	1.7
November	41.4	57.2	1.4
December	41.7	55.4	2.9
2005			
January	41.7	57.2	1.1
February	42.6	56.7	0.7
March	45.0	53.5	1.5
April	44.4	53.4	2.2
May	44.8	54.9	0.3
June	44.9	54.1	1.0

South Carolina
Office of Regulatory Staff
Generation Statistics for Major Plants
(April 2004 – June 2005)
for Duke Power Company

PLANT	TYPE FUEL	AVERAGE FUEL COST (CENTS/KWH*)	GENERATION (MWH)
Catawba	Nuclear	0.38	22,818,467
Oconee	Nuclear	0.41	23,876,347
McGuire	Nuclear	0.41	22,463,973
Marshall	Coal	1.78	18,823,365
Cliffside 5	Coal	2.20	3,709,134
Belews Crk	Coal	1.84	17,533,283

(*) The average fuel costs for coal-fired plants include oil and/or gas cost for start-up and flame stabilization.

South Carolina
Office of Regulatory Staff
SC Retail Comparison of Estimated to Actual Energy Sales
for Duke Power Company

	2005														
	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>TOTAL</u>
[1] ESTIMATED SALES [MWH]	1,667,180	1,693,985	1,805,662	1,974,270	2,062,621	1,963,472	1,630,308	1,576,709	1,686,078	1,788,334	1,750,647	1,593,694	1,607,249	1,620,886	24,421,095
[2] ACTUAL SALES [MWH]	1,671,896	1,632,881	1,936,215	1,941,395	2,001,791	1,935,473	1,625,658	1,664,218	1,710,561	1,803,088	1,789,530	1,704,461	1,633,990	1,628,822	24,679,979
[3] AMOUNT DIFFERENCE [1]-[2]	-4,716	61,104	-130,553	32,875	60,830	27,999	4,650	-87,509	-24,483	-14,754	-38,883	-110,767	-26,741	-7,936	-258,884
[4] PERCENT DIFFERENCE [3]/[2]	-0.28	3.74	-6.74	1.69	3.04	1.45	0.29	-5.26	-1.43	-0.82	-2.17	-6.50	-1.64	-0.49	-1.05

EXHIBIT ARW-5

South Carolina
Office of Regulatory Staff
SC Retail Comparison of Estimated to Actual Fuel Cost
for Duke Power Company

	2005														
	<u>2004</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>
[1] ORIGINAL PROJECTION		1.1376	1.3084	1.4105	1.4428	1.3659	1.1760	1.3434	1.3817	1.3799	1.2955	1.1363	1.3429	1.2190	1.3274
[2] ACTUAL EXPERIENCE		1.0798	1.5643	1.3164	1.3408	1.2736	1.0653	1.3038	1.1559	1.2782	1.1052	0.9821	1.2154	1.1408	1.4243
[3] AMOUNT IN BASE		1.1500	1.1500	1.1500	1.1500	1.1500	1.1500	1.1500	1.1500	1.1500	1.1500	1.1500	1.1500	1.1500	1.1500
[4] VARIANCE FROM ACTUAL [1-2]/[2]		5.35%	-16.36%	7.15%	7.61%	7.25%	10.39%	3.04%	19.53%	7.96%	17.22%	15.70%	10.49%	6.85%	-6.80%

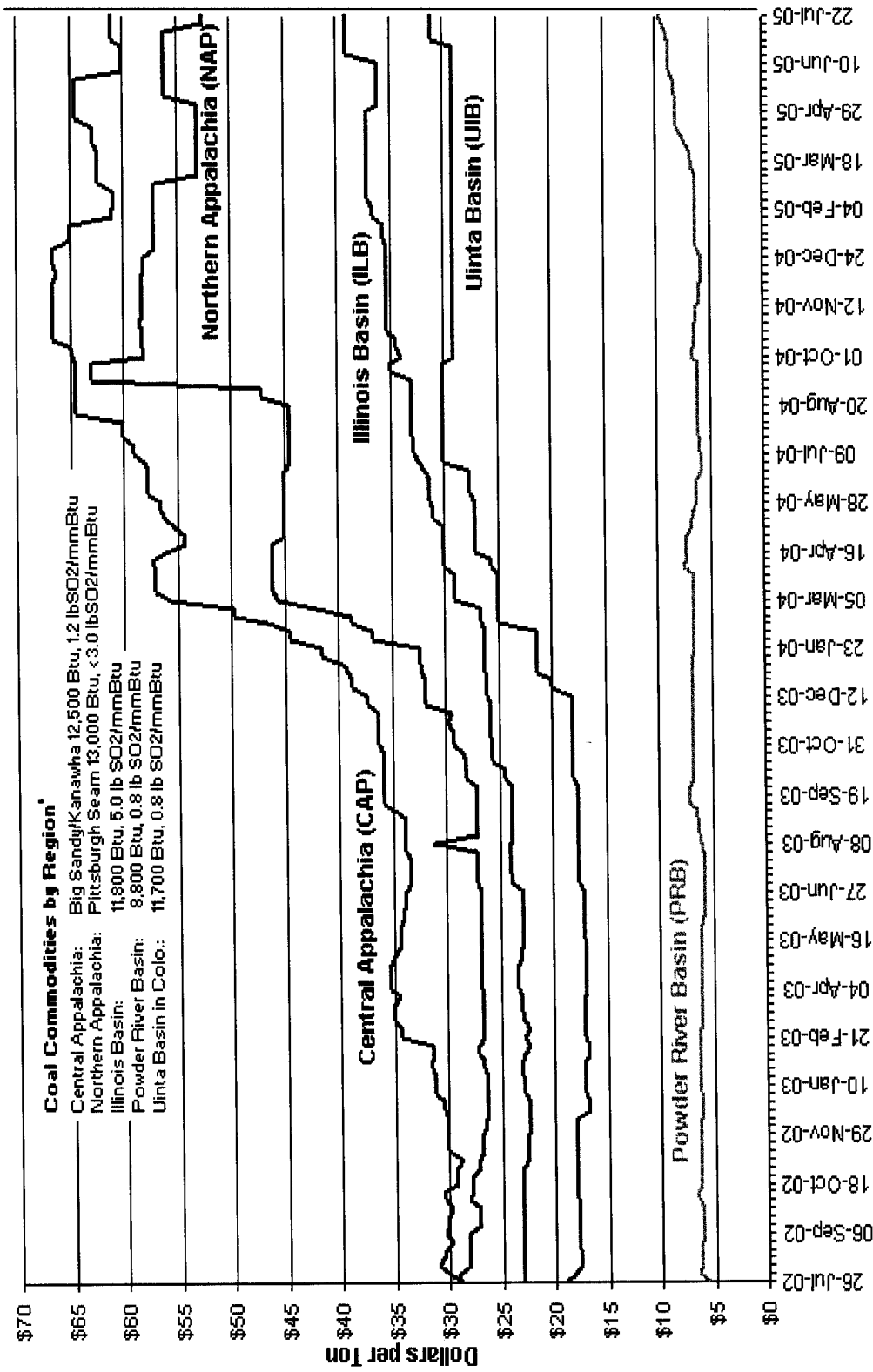
EXHIBIT ARW- 6

South Carolina
Office of Regulatory Staff
History of Cumulative Recovery Account Report
for Duke Power Company

EXHIBIT ARW-7

<u>PERIOD ENDING</u>	<u>OVER (UNDER)\$</u>
May 1979 - Automatic Fuel Adjustment in Effect	
November-79	1,398,442
May-80	11,322,948
November-80	4,588,331
May-81	(5,760,983)
November-81	(13,061,000)
May-82	(14,533,577)
November-82	(4,314,612)
May-83	20,915,390
November-83	14,192,297
May-84	18,245,503
November-84	14,478,363
May-85	2,551,115
November-85	(553,465)
May-86	(1,318,767)
November-86	(29,609,992)
May-87	(27,241,846)
November-87	(29,329,168)
May-88	(9,373,768)
November-88	6,544,914
May-89	6,067,739
November-89	11,372,399
May-90	15,421,968
November-90	2,939,303
May-91	17,068,483
November-91	21,265,000
May-92	21,080,856
November-92	11,553,801
May-93	16,959,555
November-93	221,606
May-94	6,609,897
November-94	1,037,659
May-95	5,088,619
November-95	(377,507)
March-97	(13,299,613)
March-98	(1,956,794)
March-99	13,044,443
March-00	26,703,441
March-01	20,367,528
March-02	(7,446,417)
March-03	(1,121,094)
March-04	11,424,295
June-05	(2,669,646)

Average Weekly Coal Commodity Spot Prices Business Week Ended July 22, 2005



¹ Coal prices shown are for a relatively high-Btu coal selected in each region, for delivery in the "prompt" quarter. The "prompt quarter" is the next calendar quarter, with quarters shifting forward after the 15th of the month preceding each quarter's end.
Source: with permission, selected from listed prices in Platts Coal Outlook, "Weekly Price Survey."
Note: the historical data file of spot prices is proprietary and cannot be released by EIA; see <http://www.platts.com/Coal/>; >Analytic Solutions>COAL.dat, or >Newsletters> Coal Outlook.

Duke Power

Electricity No. 4

South Carolina Eighteenth Revised Leaf No. 50B

Superseding South Carolina Seventeenth Revised Leaf No. 50B

ADJUSTMENT FOR FUEL COSTS

APPLICABILITY

This adjustment is applicable to and is a part of the Utility's South Carolina retail electric rate schedules.

The Public Service Commission has determined that the costs of Fuel in an amount to the nearest one ten-thousandth of a cent, as determined by the following formula, will be included in the base rates to the extent determined reasonable and proper by the Commission.

$$F = E / S + G / S_1$$

Where:

- F = Fuel cost per kilowatt-hour included in base rate, rounded to the nearest one ten-thousandth of a cent.
- E = Total Projected system Fuel costs:
- (A) Fuel consumed in the Utility's own plants and the Utility's share of fuel consumed in jointly owned or leased plants. The cost of fossil fuel shall include no items other than those listed in Account 151 of the Commission's Uniform System of Accounts for Public Utilities and Licensees plus SO₂ emission allowances recorded in Account 509. The cost of nuclear fuel shall be that as shown in Account 518 excluding rental payments on leased nuclear fuel and except that, if Account 518 also contains any expense for fossil fuel which has already been included in the cost of fossil fuel, it shall be deducted from this account.
- Plus
- (B) Purchased power fuel costs and applicable SO₂ emission allowances such as those incurred in unit power and Limited Term power purchases where the fuel costs and applicable SO₂ emission allowances associated with energy purchased are identifiable and are identified in the billing statement.
- Plus
- (C) Interchange power fuel costs and applicable SO₂ emission allowances such as Short Term, Economy and other where the energy is purchased on economic dispatch basis.
Energy receipts that do not involve money payments such as Diversity energy and payback of storage energy are not defined as purchased or interchange power relative to this fuel calculation.
- Minus
- (D) The cost of fuel and applicable SO₂ emission allowances recovered through intersystem sales including the fuel costs and applicable SO₂ emission allowances related to economy energy sales and other energy sold on an economic dispatch basis.
Energy deliveries that do not involve billing transactions such as Diversity energy and payback of storage energy are not defined as sales relative to this fuel calculation.
- S = Projected system kilowatt-hour sales excluding any intersystem sales.
- G = Cumulative difference between jurisdictional fuel revenues billed and fuel expenses at the end of the month preceding the projected period utilized in E and S.
- S₁ = Projected jurisdictional kilowatt-hour sales for the period covered by the fuel costs included in E.

The appropriate revenue-related tax factor is to be included in these calculations.

The fuel cost F as determined by SCPSC Order No. 2004-274 for the period June 2004 through May 2005 is 1.1500 cent per kilowatt-hour.

THE OFFICE OF REGULATORY STAFF
DIRECT TESTIMONY AND EXHIBITS
OF
JACQUELINE R. CHERRY



Docket No. 2005-3-E

Duke Power Company
Annual Review of Base Rates for Fuel Costs

TESTIMONY OF JACQUELINE R. CHERRY

FOR

THE OFFICE OF REGULATORY STAFF

DOCKET NO. 2005-3-E

IN RE: DUKE POWER COMPANY

Q. PLEASE STATE FOR THE RECORD YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.

A. My name is Jacqueline R. Cherry. My business address is 1441 Main Street, Suite 300, Columbia, South Carolina, 29201. I am employed by the Office of Regulatory Staff ("ORS") in the Audit Department, as an Audit Manager.

Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A. I received a B.S. Degree in Business Administration, with a major in Accounting from Johnson C. Smith University in 1976. I was employed by the Office of Regulatory Staff in October 2004. I have over 25 years of experience auditing utility companies, previously, for the Public Service Commission of South Carolina. I have participated in cases involving gas, electric, telephone, water and wastewater utilities.

1 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
2 **PROCEEDING?**

3 **A.** The purpose of my testimony is to summarize the results of ORS Audit
4 Staff's examination of Duke Power Company's ("the Company") Fuel
5 Adjustment Clause operation for the period April 2004 through
6 September 2005. The findings of the examination are set forth below
7 and in the exhibits attached to this testimony.

8 **Q. PLEASE IDENTIFY THE EXHIBITS ATTACHED TO YOUR PREFILED**
9 **TESTIMONY.**

10 **A.** I have attached the Audit Report of the Office of Regulatory Staff for
11 Docket No. 2005-3-E, Duke Power Company's Annual Review of Base
12 Rates for Fuel Costs, with Audit Exhibits JRC-1 through JRC-7. The
13 contents of the Audit Report were either prepared by me or were
14 prepared under my direction and supervision.

15 **Q. WHAT WAS THE SCOPE OF YOUR AUDIT?**

16 **A.** ORS Audit Staff traced the fuel information as filed in the Company's
17 required monthly reports to the Company's books and records. The
18 current fuel review covered the period April 2004 through September
19 2005. However, the ORS Audit Staff did not examine the months of
20 July, August and September 2005 because the per book figures were
21 not available. Estimated figures were used for those months. The
22 purpose of the audit was to determine if Duke Power Company had

1 computed and applied the monthly Fuel Adjustment Costs in accordance
2 with the approved tariff and S.C. Code Ann. §58-27-865(A). To
3 accomplish this task, ORS examined the components surrounding the
4 operation of the tariff.

5 **Q. WHAT WERE THE STEPS THAT THE ORS EMPLOYED WITHIN THE**
6 **SCOPE OF THE AUDIT?**

7 **A. The examination consisted of:**

- 8 1. Analyzing the Fuel Stock Account – Account # 151
- 9 2. Sampling Receipts to the Fuel Stock Account – Account # 151
- 10 3. Verifying Charges to Nuclear Fuel Expense -- Account # 518
- 11 4. Verifying Purchased & Interchange Power Fuel Costs
- 12 5. Verifying KWH Sales
- 13 6. Comparing Coal Costs
- 14 7. Analyzing Spot Coal Purchasing Procedures
- 15 8. Recalculating the Fuel Costs Adjustment Factors and Verifying
- 16 Unbilled Revenue
- 17 9. Recalculating the True-up for the Over (Under)-Recovered Fuel
- 18 Costs

19 **Q. WITH REGARD TO THE TRUE-UP OF OVER/ (UNDER)-**
20 **RECOVERED FUEL COSTS, WOULD YOU PLEASE ELABORATE**
21 **ON ORS AUDIT STAFF'S COMPUTATION?**

22 **A.** ORS analyzed the cumulative over/ (under)-recovery of fuel costs that
23 the Company incurred for the period April 2004 through June 2005.
24 The cumulative (under)-recovery amount totaled (\$2,669,646). ORS
25 then added the projected (under)-recovery of (\$4,457,586) for the

1 month of July 2005, the projected (under)-recovery of (\$10,039,684) for
2 the month of August 2005, the projected (under)-recovery of
3 (\$4,998,747) for September 2005, and the balance of the Company's
4 \$16 million Deferred Fuel Account "write-off" (approved per PSC Order
5 No. 2004-603) reflected as an over-recovery amount in September
6 2005 for \$5,029,850 (before the 1.0044 tax factor), to arrive at a
7 cumulative (under)-recovery of (\$17,135,813). The Company's
8 cumulative (under)-recovery as of September 2005, per its testimony in
9 this proceeding {Hager Exhibit No. 6}, totals (\$17,137,000). The
10 difference between the Company's and ORS's cumulative (under)-
11 recovery totals (\$1,187) {(\$1,000) on a rounded basis}, which is
12 attributed to a rounding difference.

13 It should be noted that ORS's cumulative (under)-recovery of fuel
14 costs as of actual June 2005 totaled (\$2,669,646). The Company's
15 cumulative (under)-recovery total as of actual June 2005 totaled
16 (\$2,670,000), per its testimony in this proceeding {Hager Exhibit No. 6}.
17 The difference between the Company's and the ORS's cumulative
18 (under)-recovery as of actual June 2005 totals (\$354) {\$-0- on a
19 rounded basis}. ORS Audit Exhibit JRC-7, S. C. Retail Comparison of
20 Fuel Revenues & Expenses, consisting of 4 pages, provides the details
21 for these cumulative (under)-recovery balances as of June 2005 and
22 September 2005.

1 As stated in Duke Power Company's Adjustment for Fuel Costs, fuel
2 costs will be included in base rates to the extent determined reasonable
3 and proper by the Commission. Accordingly, the Commission should
4 consider the (under)-recovery of (\$17,135,813) along with the
5 anticipated fuel costs for the period October 1, 2005 through September
6 30, 2006, for the purpose of determining the base cost of fuel in base
7 rates effective October 1, 2005. This (\$17,135,813) (under)-recovery
8 figure was provided to ORS's Electric and Gas Regulation Department.

9 **Q. MRS. CHERRY, WOULD YOU PLEASE EXPLAIN YOUR FIRST**
10 **FOOTNOTE ON ORS AUDIT EXHIBIT JRC-7?**

11 **A.** The first footnote addresses ORS Audit Staff's cumulative over-recovery
12 balance brought forward from March 2004 of \$11,424,295, as reflected
13 on Audit Exhibit JRC-7. This is the amount of the cumulative over-
14 recovery balance as of March 2004, as shown on the PSC "Commission
15 Staff Report" (Docket No. 2004-3-E, Audit Exhibit G -Page 2 of 4), from
16 Duke Power Company's last fuel review period (actual April 2003 –
17 March 2004), Docket No. 2004-3-E. The Company's beginning
18 cumulative over-recovery balance from March 2004 totals \$12,105,373
19 per books. This beginning cumulative balance over-recovery difference
20 as of March 2004 between the ORS and the Company totals \$681,078.
21 It should be noted that Duke Power Company, in its testimony in this

1 current case, includes an applicable (under)-recovery adjustment to
2 June 2004's monthly deferred entry, on a rounded basis, of (\$681,000).

3 **Q. MRS. CHERRY, WOULD YOU PLEASE EXPLAIN YOUR SECOND**
4 **FOOTNOTE ON ORS AUDIT EXHIBIT JRC-7?**

5 **A.** Yes. The second footnote addresses ORS Audit Staff's adjustments to
6 the Company's Purchased Power Costs, on a total system basis. ORS's
7 Purchased Power figures for April 2004 through September 2005 and
8 the resultant over/(under)-recovery monthly deferred fuel amounts for
9 April 2004 through June 2005 reflect ORS's verification of the
10 Company's compliance with the revised section of the S.C. Fuel Statute
11 (updated as of February 2004), S.C. Code Ann. §58-27-865(A). This
12 Statute addresses "fuel costs related to purchased power." Sub-section
13 (A)(2)(b) of the revised Statute states that the delivered cost of
14 economy purchases, including transmission charges, could be included
15 in Purchased Power Costs if those types of purchases were proven to
16 be "less than the purchasing utility's avoided variable costs for the
17 generation of an equivalent quantity of electric power." Duke reflects its
18 Purchased Power figures that contain purchases with non-identifiable
19 fuel costs on a N.C. Fuel Clause basis, which uses a percentage-
20 computed fuel proxy. Identifiable fuel costs are reflected as identified.
21 In order to comply with this S.C. revision, Duke adjusted its review
22 period's Purchased Power Costs to reflect the purchase costs allowable

1 under the S.C. Fuel Adjustment Statute. Therefore, after Duke applied
2 this revised Statute to the examined economic purchases along with the
3 applicable avoided costs, Duke's adjustment increased the review
4 period's Purchased Power Costs, on a total system—native load basis
5 (i.e., applicable to native load customers on a total system basis) by
6 \$9,459,687. ORS also examined the economic purchases along with
7 the applicable avoided costs for the review period. ORS agrees with
8 Duke's increase to Purchased Power Costs, on a total system—native
9 load basis, by \$9,459,687.

10 **Q. DID THE COMPANY MAKE ANY ADJUSTMENTS OR TRUE-UPS**
11 **DURING THE ACTUAL REVIEW PERIOD?**

12 **A.** Yes. My third footnote in Audit Exhibit JRC-7 explains that during the
13 review period, the Company made various adjustments to the cumulative
14 balance of the Deferred Fuel Account. The adjustments were as follows:
15 (A) Pursuant to the Public Service Commission's Order No. 2004-603,
16 dated December 9, 2004, Duke requested and it was approved for Duke
17 to change its 2005 S.C. Fuel Review hearing schedule to the last
18 Wednesday in August 2005. Duke was concerned that because of the
19 extension of its present fuel factor until October 1, 2005 its retail
20 customers would become concerned about "possible 'rate shock'".
21 Therefore, in this Order, the PSC approved the Company's request to
22 "forgo and write-off the recovery of fuel costs of up to \$16 million" through

1 September 30, 2005. This process reduced the cumulative balance of
2 the Deferred Fuel Account on a quarterly basis beginning on the date of
3 the Order. The Company's "write-off" adjustments (before the 1.0044 tax
4 factor) were: (a) Dec. 2004-Over-Recovery Adj. -- \$6,717,740;
5 (b) March 2005 -- (Under)-Recovery Adj. -- (\$2,697,689); (c) June 2005 --
6 Over-Recovery Adj. -- \$6,880,008; and (d) For estimated Sept. 2005 --
7 Over-Recovery Adj. for the balance of the \$16 Million -- \$5,029,850.

8 ORS agrees with these quarterly adjustments.

9 (B) In April 2005, the Company made an over-recovery adjustment to the
10 S.C. Deferred Fuel Account for \$1,056,943 to reflect corrections for 2004
11 and three months of 2005 to Catawba Sales Energy Imbalance amounts.

12 ORS agrees with this adjustment.

13 **Q. MRS. CHERRY, WOULD YOU PLEASE EXPLAIN YOUR FOURTH**
14 **FOOTNOTE ON ORS AUDIT EXHIBIT JRC-7?**

15 **A.** Yes. Fossil Fuel Costs for the estimated month of July 2005 include a
16 reduction adjustment to reflect a settlement agreement between Duke
17 Power Company and Norfolk Southern Railway Company. The amount
18 of this adjustment is confidential. However, the ORS Audit Staff, under
19 terms of confidentiality, reviewed a summary version of the settlement
20 agreement because the formal version of the agreement had not been
21 completed as of the date of the ORS audit. The ORS review included
22 recalculating any monetary information available in the settlement

1 agreement summary. After completing the review, ORS agrees with this
2 adjustment.

3 **Q. MRS. CHERRY, WOULD YOU PLEASE EXPLAIN YOUR FINAL**
4 **FOOTNOTE ON ORS AUDIT EXHIBIT JRC-7?**

5 A. My fifth and final footnote in Audit Exhibit JRC-7, explains that Nuclear Fuel
6 Costs for the estimated month of July 2005 includes a reduction adjustment
7 to reflect a settlement agreement between Duke Power Company (and
8 eight other utilities) and the Department of Energy (DOE). The amount of
9 this adjustment is confidential. However, the ORS Audit Staff, under terms
10 of confidentiality, reviewed a summary version of the settlement agreement
11 because the formal version of the agreement had not been completed as of
12 the ORS audit. The ORS review included recalculating any monetary
13 information available in the settlement agreement summary. After
14 completing the review, ORS agrees with this adjustment.

15 **Q. HOW DID THIS IMPACT THE (UNDER)-RECOVERY OF FUEL COSTS?**

16 A. As mentioned previously, the ORS cumulative (under)-recovery of fuel
17 costs as of actual June 2005 totaled (\$2,669,646). The Company's
18 cumulative (under)-recovery total as of actual June 2005 totaled
19 (\$2,670,000). The difference between the Company's and ORS's
20 cumulative (under)-recovery as of actual June 2005 totaled (\$354), which
21 was \$-0- on a rounded basis. The cumulative (under)-recovery balance
22 as of estimated September 2005 of the Company totaled (\$17,137,000)

1 and the ORS totaled (\$17,135,813), which reflected a cumulative (under)-
2 recovery rounding difference of (\$1,187) {or (\$1,000) on a rounded basis}.

3 **Q. MRS. CHERRY, WOULD YOU PLEASE DESCRIBE THE ORS AUDIT**
4 **STAFF EXHIBITS?**

5 **A.** ORS prepared exhibits from Duke Power Company's books and records
6 reflecting fuel costs during the review period.

7 Specifically, these exhibits are as follows:

8 Exhibit JRC-1: Coal Cost Statistics

9 Exhibit JRC-2: Received Coal-Cost Per Ton Comparison

10 Exhibit JRC-3: Detail of Nuclear Cost

11 Exhibit JRC-4: Total Burned Cost (Fossil and Nuclear)

12 Exhibit JRC-5: Cost of Fuel

13 Exhibit JRC-6: Factor Computation

14 Exhibit JRC-7: S.C. Retail Comparison of Fuel Revenues & Expenses

15 **Q. MRS. CHERRY, WHAT WERE THE RESULTS OF THE ORS AUDIT**
16 **DEPARTMENT'S REVIEW?**

17 **A.** Based on the ORS Audit Staff's examination of Duke Power Company's
18 books and records, and the utilization of the fuel cost recovery mechanism
19 as approved by the Commission, the ORS Audit Department is of the
20 opinion that the Company has complied with the S.C. Fuel Statute.

21 **Q. MRS. CHERRY, DOES THIS CONCLUDE YOUR TESTIMONY?**

22 **A.** Yes, it does.

REPORT OF THE AUDIT DEPARTMENT

THE OFFICE OF REGULATORY STAFF

DOCKET NO. 2005-3-E

DUKE POWER COMPANY

REPORT OF THE AUDIT DEPARTMENT
THE OFFICE OF REGULATORY STAFF
DOCKET NO. 2005-3-E
DUKE POWER COMPANY
ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS
REVIEW PERIOD: APRIL 1, 2004 – JUNE 30, 2005 (ACTUAL)

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Note: The ORS Audit Staff prepared all of the ORS Audit Exhibits.

REPORT OF THE AUDIT DEPARTMENT
DOCKET NO. 2005-3-E
DUKE POWER COMPANY
ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS

ANALYSIS

The Office of Regulatory Staff's (ORS) Audit Department examined the books and records of Duke Power Company (hereinafter referred to as "the Company" or "Duke") relative to the requirement under Docket No. 2005-3-E and S.C. Code Ann. §58-27-865(A), that periodic hearings be conducted before the Commission concerning the Adjustment of Base Rates for Fuel Costs.

The current examination of Duke Power Company's Retail Fuel Adjustment Clause covered the period of April 2004 through September 2005. However, the ORS Audit did not examine the months of July, August, and September 2005 because the per book figures were not available during ORS's audit. The amounts of over/(under)-recovery for July 2005, August 2005 and September 2005 were estimated for the purpose of adjusting base rates effective October 1, 2005. The estimates for these three months will be subject to true-up at Duke Power Company's next hearing.

The ORS Audit Department's examination consisted of the following:

1. Analyzing the Fuel Stock Account -- Account # 151
2. Sampling Receipts to the Fuel Stock Account -- Account #151

3. Verifying Charges to Nuclear Fuel Expense -- Account # 518
4. Verifying Purchased and Interchange Power Fuel Costs
5. Verifying KWH Sales
6. Comparing Coal Costs
7. Analyzing Spot Coal Purchasing Procedures
8. Recalculating the Fuel Costs Adjustment Factors and Verifying Unbilled Revenues
9. Recalculating the True-up for the Over (Under)-Recovered Fuel Cost

1. ANALYZING THE FUEL STOCK ACCOUNT - ACCOUNT # 151

ORS's analysis of the Fuel Stock Account consisted of tracing receipts to the fuel management system and issues from the fuel management system to the General Ledger, reviewing monthly fuel charges originating in fuel accounting, and ensuring proper charges are entered in the Company's computation of fuel costs for purposes of adjusting base rates for fuel costs.

2. SAMPLING RECEIPTS TO THE FUEL STOCK ACCOUNT-- ACCOUNT #151

ORS's sample of coal receipts to the Fuel Stock Account consisted of randomly selecting transactions and tracing each of these randomly selected transactions to a waybill, purchase order and freight voucher for documentation purposes. It also consisted of recalculating the transactions to insure mathematical accuracy.

3. VERIFYING CHARGES TO NUCLEAR FUEL EXPENSE - ACCOUNT # 518

ORS traced the expense amounts for nuclear fuel to the books and records for the period April 2004 through June 2005 to verify the accuracy of the expenses to fuel amortization schedules and to the Company's monthly filings to the ORS.

4. VERIFYING PURCHASED AND INTERCHANGE POWER FUEL COSTS

ORS performed an examination of the Company's purchased and interchange power amounts used in the Fuel Adjustment Clause (FAC) for the period April 2004 through June 2005.

ORS obtained the detail of the purchases and sales made by Duke to and from other electric utilities. ORS verified the amounts that are being used in computing total fuel costs for each month. These details allowed ORS to identify fuel costs that are being passed through the clause in computing the factor above or below the base for each period. See ORS's Exhibit JRC-5 for details.

ORS's Purchased Power figures for April 2004 through June 2005 and the resultant over (under)-recovery monthly deferred fuel amounts for April 2004 through June 2005 reflect ORS's verification of the Company's compliance with the revised section of the S.C. Fuel Statute (updated as of February 2004), S.C. Code Ann. §58-27-865(A). This Statute addresses "fuel costs related to purchased power." Sub section (A)(2)(b) of the revised Statute states that the delivered cost of economy purchases, including transmission charges, could be included in Purchased Power Costs if those types of purchases were proven to be "less than the purchasing utility's avoided variable costs for the generation of an equivalent quantity of electric power." Duke reflects its Purchased Power figures that contain purchases with non-identifiable fuel costs on a N.C. Fuel Clause basis, which uses a percentage-computed fuel proxy. Identifiable fuel costs are reflected as identified. In order to comply with this S.C. revision, Duke adjusted its review period's Purchased Power Costs to reflect the purchase costs allowable under the S.C. Fuel Adjustment

Statute. Therefore, after Duke applied this revised Statute to the examined economic purchases along with the applicable avoided costs, Duke's adjustment increased the review period's Purchased Power Costs, on a total system—native load basis (i.e., applicable to native load customers on a total system basis) by \$9,459,687. ORS also examined economic purchases along with the applicable avoided costs for the review period. ORS's adjustment of \$9,459,687, which increased Purchased Power Costs, agreed with Duke's true-up adjustment based on the S.C. revised Statute. This figure reflects the usage of the purchased energy cost as a lesser price, at that point in time, over Duke's avoided cost.

ORS traced the sales and purchases transactions for April 2004 through June 2005 to the Company's sales and purchases monthly reports and, on a sample basis, traced to monthly invoices. ORS recomputed the sales and purchases.

5. VERIFYING KWH SALES

ORS verified total system sales, as filed in the monthly fuel factor computation, for the months of April 2004 through June 2005. This monthly figure was then used to determine the fuel cost per KWH sold.

6. COMPARING COAL COSTS

ORS prepared exhibits from Duke's books and records reflecting coal costs during the review period. Specifically, these exhibits are as follows:

Audit Exhibit JRC-1: COAL COST STATISTICS

Audit Exhibit JRC-2: RECEIVED COAL-COST PER TON COMPARISON

With reference to Audit Exhibit JRC-1, Coal Cost Statistics, ORS has shown a detailed analysis of spot and contract coal for fifteen (15) months ending June 2005.

Also, in Audit Exhibit JRC-1, the Weighted Average of Coal Received is reflected for the fifteen-month period. Total costs for the fifteen-month period were divided by the total tons for the fifteen-month period in arriving at the average costs per ton received of \$51.92.

In Audit Exhibit JRC-2, Received Coal-Cost Per Ton Comparison, ORS reflects the overall cost per ton of coal by month for the three major electric utilities regulated by this Commission.

7. ANALYZING SPOT COAL PURCHASING PROCEDURES

ORS examined the procedure followed by the Company's fossil fuel area, the Coal and Bulk Materials Procurement Section, for obtaining and accepting bids on spot coal. To achieve this, ORS chose three months of the audit period that had the largest amounts of accepted proposals for spot coal. ORS examined spot coal proposals received in the months of May 2004, January 2005 and April 2005.

The Coal and Bulk Materials Procurement Section maintains a list of coal vendors (suppliers) from whom proposals are received monthly. When bids are requested, the Coal and Bulk Materials Procurement Section electronically mails each of these coal vendors a Spot Offer Form and letter requesting bids. These coal vendors generally send their proposals to Duke via Spot Offer Forms, with each proposal or offer on a separate form. In order for a coal vendor's name to be on this mailing list, the coal vendor must possess the necessary financial, technical, and business resources to supply coal consistent with the Company's requirements.

The Spot Offer Forms require information such as the name of the coal company (the supplier), the name of the producer, the name of the mine, the number

of tons offered, coal specifications, price per ton, the month(s) the shipment will be made, mining methods of the producer, and shipping transportation data. It should be noted that these solicitation letters and Spot Offer Forms, based on whether a coal vendor has any coal to sell, are sent to the suppliers when there are near-term needs (one to eleven months) for coal.

If the Company decides to purchase spot coal in a given month, after reviewing their spot coal requirements, then all the bids received are evaluated. The Company normally requires all bids to be made on Spot Offer Forms. For evaluation purposes, ranked bids are reviewed through the Fuel Procurement Information System and an economic analysis is performed. This is in addition to recommending the distribution of the coal to the plants to ensure compliance with sulfur limitations imposed by State and Federal regulations, as well as to exclude any coal that may exceed other environmental and generating unit constraints. The Spot Offer Forms are compiled on a Bid Evaluation computer run which is listed alphabetically by plant, with each plant's spot coal offers ranked by cost per MBTU. Also included on the Bid Evaluation computer run is the name of the coal company, the name of the producer, number of tons offered, coal specifications, the number of tons purchased, the plant to which the coal was shipped, or a reason for rejecting the offer.

The Company's coal procurement personnel consider at least three factors when they evaluate the coal bids: (a) cost of the delivered coal on a cents/mmmbtu basis (including freight), (b) the BTU, ash, moisture, volatiles, grindability, ash softening temperature, and sulfur content of the coal offered (for operational and environmental purposes), and (c) the past performance of the supplier and the coal obtained from the

producer. The Company's coal procurement personnel determine the current market price for coal prior to negotiating with the coal vendors over their bids. In this way, the coal procurement personnel determine the limits they should stay within when bargaining for coal. The coal procurement personnel bargain over the price of the coal as well as other possible terms and conditions of a prospective purchase. Coal procurement personnel will either accept or reject the coal vendor's offer or make a counter-offer to the vendor's offer.

Upon agreement on a coal purchase, the Coal and Bulk Materials Procurement Section executes a contract. Both parties sign the contract. Also, the Coal and Bulk Materials Procurement Section prepares a purchase order, a copy of which is mailed to the coal vendor. The coal vendor takes samples of coal according to ASTM Standards. The samples are sent to an independent fuel laboratory which analyzes each spot coal shipment for BTU, ash, moisture and sulfur content, and periodically analyzes coal for volatiles, grindability, and ash softening temperature. When the coal is received at the plant, the Company also analyzes the coal for the aforementioned qualities and then prepares a coal analysis report. The coal analysis results are entered into the computerized Fuel Management System, which is used by the Coal and Bulk Materials Procurement Section to monitor coal receipts and to process coal payments. The appropriate premium or penalty on the coal purchased is determined by the Coal and Bulk Materials Procurement Section, and the results are forwarded to the Company's Accounting Section, which in turn, through the Fuel Management System adds a premium or assesses a penalty to the total amount due to the coal vendor. The Coal and Bulk Materials Procurement Section closely monitors the quality and reliability of

coal shipped by various producers. If a certain producer renders poor performance, the coal procurement personnel consider this past performance when analyzing any future offers received from the supplier.

Occasionally, the Coal and Bulk Materials Procurement Section receives unsolicited bids for the purchase of coal. The same procedure used for evaluating solicited bids is used when evaluating the offer: determining the need for spot coal, cost, purchasing, sampling, and assessing penalties or premiums.

The Company's spot coal requirements are obtained through short-term commitments with terms that may range from one month to eleven months duration.

As mentioned previously, ORS examined spot coal offers received for the months of May 2004, January 2005 and April 2005. ORS obtained the Company's Bid Evaluation computer runs for the aforementioned months. During May 2004, eight offers were submitted (per offer forms). Duke accepted eight bids that resulted in ten orders (several plant orders per offer form). During January 2005, sixteen offers were submitted (per offer forms). Duke accepted fifteen bids that resulted in eighteen orders (several plant orders per offer form). During April 2005, five offers were submitted (per offer forms). Duke accepted four bids that resulted in eight orders (several plant orders per offer form). The actual amount of spot coal received for this period is reflected in ORS's Audit Exhibit JRC-1.

8. RECALCULATING THE FUEL COSTS ADJUSTMENT FACTORS AND VERIFYING UNBILLED REVENUES

ORS recalculated the Fuel Costs Adjustment Factors for the months of April 2004 through June 2005 utilizing information obtained from the Company's records.

With reference to fuel cost, ORS verified the Total Fuel Costs for the months of April 2004 through June 2005 to the Company's books and records.

In recalculating the monthly factors, ORS divided the Total Cost of Fuel Burned by Total System Sales to arrive at fuel costs per KWH sales. The base fuel cost per KWH, included in the base rates, is then subtracted from the fuel cost per KWH sales and the resulting figure represents the fuel cost adjustment above or below base per KWH sales. The South Carolina Retail Jurisdictional KWH deferrals were checked to the Company's records. The actual Unbilled Revenue for each month was verified to the Company's books and records.

9. RECALCULATING THE TRUE-UP FOR THE OVER (UNDER)-RECOVERED FUEL COSTS

ORS analyzed the cumulative (under)-recovery of fuel costs the Company incurred for the period April 2004 through June 2005 totaling (\$2,669,646). ORS added the projected (under)-recovery of (\$4,457,586) for the month of July 2005, the projected (under)-recovery of (\$10,039,684) for the month of August 2005, the projected (under)-recovery of (\$4,998,747) for the month of September 2005, and the balance of the Company's \$16 million Deferred Fuel Account "write-off" (approved per PSC Order No. 2004-603) reflected as an over-recovery amount in September 2005 for \$5,029,850 (before the 1.0044 tax factor), to arrive at a cumulative (under)-recovery of (\$17,135,813) as of September 2005. The Company's cumulative (under)-recovery, per its testimony in this proceeding, as of June 2005 totals (\$2,670,000) and as of September 2005, the cumulative (under)-recovery totals (\$17,137,000). The difference between the Company's and the

ORS's cumulative (under)-recovery as of actual June 2005 totals (\$354) {\$-0- on a rounded basis}. The difference between the Company's and ORS's cumulative (under)-recovery, as of September 2005, totals (\$1,187) {(\$1,000) on a rounded basis}. ORS Audit Exhibit JRC-7, S.C. Retail Comparison of Fuel Revenues and Expenses, consisting of 4 pages, provides the explanation for this cumulative (under)-recovery difference as of September 2005.

As stated in Duke Power Company's S.C. Retail Adjustment for Fuel Costs Rider, fuel costs will be included in base rates to the extent determined reasonable and proper by the Commission. Accordingly, the Commission should consider the (under)-recovery of (\$17,135,813) along with the anticipated fuel costs for the period October 1, 2005 through September 30, 2006, for the purpose of determining the base cost of fuel in base rates effective October 1, 2005. This (\$17,135,813) (under)-recovery figure was provided to ORS's Electric and Gas Regulation Department.

EXHIBITS

Exhibits relative to this proceeding are identified as follows:

AUDIT EXHIBIT JRC-1: COAL COST STATISTICS (AND WEIGHTED AVERAGE OF COAL RECEIVED)

In Audit Exhibit JRC-1, Coal Cost Statistics, ORS compares spot and contract coal received for the period April 2004 through June 2005. The comparison is made in the following five (5) areas:

(1) Tons Received

- (2) Percentage of Total Tons Received
- (3) Received Cost Per Ton
- (4) Total Received Cost
- (5) Cost Per MBTU

This exhibit also reflects the total spot and contract tons received during the period April 2004 through June 2005. ORS has taken the total received cost for the fifteen (15) months and divided this by the total tons for the fifteen (15) months in arriving at a Weighted Average Cost per ton for the fifteen (15)-month period.

AUDIT EXHIBIT JRC-2: RECEIVED COAL-COST PER TON COMPARISON

This exhibit reflects the received cost per ton for coal for each month from April 2004 through June 2005 for Duke Power Company, Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. and South Carolina Electric & Gas Company. ORS has shown, for comparison purposes, the invoice cost per ton, freight cost per ton, total cost per ton and the cost per MBTU.

AUDIT EXHIBIT JRC-3: DETAIL OF NUCLEAR COST

In Exhibit JRC-3, ORS has shown in detail, the two components in total nuclear costs. These components are as follows:

- 1. Burn-up Cost
- 2. Disposal Cost

AUDIT EXHIBIT JRC-4: TOTAL BURNED COST (FOSSIL AND NUCLEAR)

This exhibit reflects the per book cost of burned fuel, including emission allowance expenses, and the percentage of the Total Burned Costs for fossil and

nuclear fuel by months used for generation for the period April 2004 through June 2005. The burned cost of each class of fuel is shown separately.

AUDIT EXHIBIT JRC-5: COST OF FUEL

In Audit Exhibit JRC-5, ORS has computed the total fuel cost applicable to the factor computation. There are three (3) components used in arriving at this cost. These components are as follows:

- (1) Cost of Fuel Burned
- (2) Purchase and Interchange Power Fuel Cost
- (3) Fuel Cost Recovered through Intersystem Sales

Cost of Fuel Burned---This amount is the burned cost of all fossil and nuclear fuel burned during the period. The costs associated with emission allowances are also reflected. A detailed breakdown of coal, oil, gas, emission allowances and nuclear fuel can be seen in Audit Exhibit JRC-4.

Purchase and Interchange Power Fuel Cost--- This amount is the monthly kilowatt hours delivered to or received by one electric utility from another electric utility.

Fuel Cost Recovered through Intersystem Sales--- This amount is the fuel-related cost of KWH's sold during the period to other electric utilities and /or power marketers.

Total fuel cost applicable to the factor is computed by adding the cost of fuel burned to purchased and interchange power fuel cost. This amount is then reduced by fuel associated with intersystem sales.

AUDIT EXHIBIT JRC-6: FACTOR COMPUTATION

ORS has computed the Fuel Cost Adjustment Factor by month beginning with April 2004 and going through June 2005. In computing this factor, total fuel cost applicable to the Fuel Adjustment Clause is divided by total system sales, excluding intersystem sales. This results in fuel cost per KWH. The fuel cost per KWH is then compared to the base cost per KWH as ordered by the Commission. This variance is reflected as the monthly fuel cost adjustment factor.

AUDIT EXHIBIT JRC-7: S.C. RETAIL COMPARISON OF FUEL REVENUES AND EXPENSES

Shown in this exhibit are the actual costs for April 2004 through June 2005 and the estimated fuel costs for July, August and September 2005.

DUKE POWER COMPANY
COAL COST STATISTICS
APRIL 2004 - JUNE 2005

SPOT

<u>MONTH</u>	<u>TONS RECEIVED</u>	<u>PERCENTAGE</u>	<u>COST/TON RECEIVED</u>	<u>TOTAL RECEIVED COST</u>	<u>\$/MBTU</u>
	TONS	%	\$	\$	\$
Apr-04	100,266.75	7.40%	49.97	5,010,421.02	2.0856
May-04	218,374.15	13.46%	54.02	11,796,431.00	2.2155
Jun-04	168,357.50	12.08%	55.15	9,284,441.83	2.3100
Jul-04	217,246.15	14.44%	56.10	12,186,571.76	2.3183
Aug-04	222,527.15	14.47%	59.56	13,253,674.68	2.4625
Sep-04	132,090.85	10.48%	62.59	8,267,426.39	2.6241
Oct-04	174,328.40	11.94%	56.04	9,769,844.23	2.4024
Nov-04	130,087.50	10.08%	55.90	7,271,782.11	2.3478
Dec-04	242,837.70	17.72%	51.66	12,544,234.50	2.1979
Jan-05	153,814.65	10.97%	57.81	8,891,743.07	2.3853
Feb-05	207,557.10	15.24%	62.14	12,896,773.52	2.5167
Mar-05	189,977.20	12.21%	66.70	12,671,112.28	2.6610
Apr-05	139,441.33	9.59%	71.01	9,901,144.28	2.8074
May-05	169,142.63	10.03%	71.09	12,024,945.92	2.9758
Jun-05	255,770.05	16.92%	75.99	19,436,405.54	2.8916
Totals (4/04- 6/05)	2,721,819.11			165,206,952.13	

CONTRACT

<u>MONTH</u>	<u>TONS RECEIVED</u>	<u>PERCENTAGE</u>	<u>COST/TON RECEIVED</u>	<u>TOTAL RECEIVED COST</u>	<u>\$/MBTU</u>
	TONS	%	\$	\$	\$
Apr-04	1,254,115.15	92.60%	47.40	59,448,327.28	1.9212
May-04	1,404,047.85	86.54%	47.07	66,088,144.30	1.9195
Jun-04	1,225,560.08	87.92%	47.68	58,440,136.17	1.9496
Jul-04	1,287,727.30	85.56%	49.20	63,361,136.27	2.0066
Aug-04	1,314,879.95	85.53%	49.28	64,794,226.83	1.9974
Sep-04	1,128,734.05	89.52%	49.09	55,410,410.63	2.0003
Oct-04	1,286,215.80	88.06%	47.72	61,375,780.45	1.9459
Nov-04	1,160,758.10	89.92%	48.94	56,802,179.49	1.9907
Dec-04	1,127,508.75	82.28%	51.12	57,632,894.51	2.0864
Jan-05	1,248,159.10	89.03%	52.19	65,146,891.81	2.1342
Feb-05	1,153,974.25	84.76%	52.48	60,562,287.24	2.1417
Mar-05	1,366,042.90	87.79%	53.59	73,205,931.93	2.1896
Apr-05	1,314,308.35	90.41%	54.39	71,480,277.62	2.1830
May-05	1,517,409.70	89.97%	53.69	81,467,578.76	2.2076
Jun-05	1,256,214.00	83.08%	55.48	69,697,987.27	2.2283
Totals (4/04- 6/05)	19,045,655.33			964,914,190.56	

DUKE POWER COMPANY
COAL COST STATISTICS
APRIL 2004 - JUNE 2005

COMBINED

<u>MONTH</u>	<u>TONS RECEIVED</u> TONS	<u>PERCENTAGE</u> %	<u>COST/TON</u> <u>RECEIVED</u> \$	<u>TOTAL RECEIVED</u> <u>COST</u> \$	<u>\$/MBTU</u> \$
Apr-04	1,354,381.90	100.00%	47.59	64,458,748.30	1.9331
May-04	1,622,422.00	100.00%	48.01	77,884,575.30	1.9591
Jun-04	1,393,917.58	100.00%	48.59	67,724,578.00	1.9922
Jul-04	1,504,973.45	100.00%	50.20	75,547,708.03	2.0517
Aug-04	1,537,407.10	100.00%	50.77	78,047,901.51	2.0639
Sep-04	1,260,824.90	100.00%	50.50	63,677,837.02	2.0631
Oct-04	1,460,544.20	100.00%	48.71	71,145,624.68	1.9980
Nov-04	1,290,845.60	100.00%	49.64	64,073,961.60	2.0264
Dec-04	1,370,346.45	100.00%	51.21	70,177,129.01	2.1058
Jan-05	1,401,973.75	100.00%	52.81	74,038,634.88	2.1615
Feb-05	1,361,531.35	100.00%	53.95	73,459,060.76	2.1993
Mar-05	1,556,020.10	100.00%	55.19	85,877,044.21	2.2537
Apr-05	1,453,749.68	100.00%	55.98	81,381,421.90	2.2454
May-05	1,686,552.33	100.00%	55.43	93,492,524.68	2.2832
Jun-05	1,511,984.05	100.00%	58.95	89,134,392.81	2.3457
Totals (4/04- 6/05)	21,767,474.44			1,130,121,142.69	

<u>Total Received Cost</u>	=	<u>\$ 1,130,121,142.69</u>	=	<u>\$ 51.92</u>
<u>Total Tons Received</u>		<u>21,767,474.44</u>		

Note: Prepared by the ORS Audit Staff.

**DUKE POWER COMPANY
RECEIVED COAL - COST PER TON COMPARISON
APRIL 2004 - JUNE 2005**

DUKE POWER COMPANY

<u>MONTH</u>	<u>INVOICE COST</u>	<u>FREIGHT COST PER</u>	<u>TOTAL COST</u>	
	<u>PER TON</u>	<u>TON</u>	<u>PER TON</u>	<u>COST PER MBTU</u>
	\$	\$	\$	\$
Apr-04	32.18	15.41	47.59	1.9331
May-04	32.46	15.55	48.01	1.9591
Jun-04	32.05	16.54	48.59	1.9922
Jul-04	33.40	16.80	50.20	2.0517
Aug-04	34.25	16.52	50.77	2.0639
Sep-04	33.74	16.76	50.50	2.0631
Oct-04	32.17	16.54	48.71	1.9980
Nov-04	35.08	14.56	49.64	2.0264
Dec-04	33.79	17.42	51.21	2.1058
Jan-05	35.89	16.92	52.81	2.1615
Feb-05	37.66	16.29	53.95	2.1993
Mar-05	37.21	17.98	55.19	2.2537
Apr-05	37.29	18.69	55.98	2.2454
May-05	37.80	17.63	55.43	2.2832
Jun-05	40.33	18.62	58.95	2.3457

CAROLINA POWER & LIGHT COMPANY d/b/a PROGRESS ENERGY CAROLINAS, INC

<u>MONTH</u>	<u>INVOICE COST</u>	<u>FREIGHT COST PER</u>	<u>TOTAL COST</u>	
	<u>PER TON</u>	<u>TON</u>	<u>PER TON</u>	<u>COST PER MBTU</u>
	\$	\$	\$	\$
Apr-04	36.42	14.61	51.03	2.0560
May-04	35.64	15.04	50.68	2.0446
Jun-04	38.54	14.54	53.08	2.1495
Jul-04	44.20	13.78	57.98	2.3376
Aug-04	43.73	13.92	57.65	2.3394
Sep-04	41.06	14.03	55.09	2.2249
Oct-04	38.67	15.17	53.84	2.1706
Nov-04	41.14	14.84	55.98	2.2514
Dec-04	46.81	18.15	64.96	2.6387
Jan-05	44.38	18.58	62.96	2.5318
Feb-05	44.43	18.30	62.73	2.5100
Mar-05	47.05	17.69	64.74	2.5980
Apr-05	48.03	19.16	67.19	2.6927
May-05	47.41	19.65	67.06	2.7308
Jun-05	49.55	21.50	71.05	2.8719

**DUKE POWER COMPANY
RECEIVED COAL - COST PER TON COMPARISON
APRIL 2004 - JUNE 2005**

SOUTH CAROLINA ELECTRIC & GAS COMPANY

<u>MONTH</u>	<u>INVOICE COST</u> <u>PER TON</u>	<u>FREIGHT COST PER</u> <u>TON</u>	<u>TOTAL COST</u> <u>PER TON</u>	<u>COST PER MBTU</u>
	\$	\$	\$	\$
Apr-04	37.53	13.40	50.93	2.0176
May-04	37.52	12.07	49.59	1.9566
Jun-04	39.53	12.92	52.45	2.0821
Jul-04	35.93	12.61	48.54	1.9187
Aug-04	41.14	11.26	52.40	2.0844
Sep-04	38.07	14.20	52.27	2.0901
Oct-04	37.82	13.17	50.99	2.0357
Nov-04	43.54	11.34	54.88	2.1668
Dec-04	37.47	12.94	50.41	2.0026
Jan-05	49.94	10.74	60.68	2.3853
Feb-05	43.17	15.49	58.66	2.3205
Mar-05	48.62	12.41	61.03	2.4081
Apr-05	47.06	13.81	60.87	2.4112
May-05	44.95	13.85	58.80	2.3278
Jun-05	46.56	15.36	61.92	2.4429

Note: Prepared by the ORS Audit Staff.

**DUKE POWER COMPANY
DETAIL OF NUCLEAR COST
APRIL 2004 - JUNE 2005**

MONTH	BURN-UP COST	DISPOSAL COST	TOTAL NUCLEAR COST
	\$	\$	\$
Apr-04	8,420,506	2,556,255	10,976,761
May-04	9,693,821	2,981,755	12,675,576
Jun-04	10,102,929	3,098,329	13,201,258
Jul-04	11,415,962	3,593,370	15,009,332
Aug-04	11,710,043	3,539,401	15,249,444
Sep-04	11,054,341	3,324,381	14,378,722
Oct-04	9,303,200	2,676,989	11,980,189
Nov-04	8,968,636	2,607,547	11,576,183
Dec-04	10,143,746	3,009,427	13,153,173
Jan-05	11,540,467	3,550,667	15,091,134
Feb-05	10,638,275	3,165,034	13,803,309
Mar-05	10,041,093	2,848,193	12,889,286
Apr-05	10,197,331	2,524,519	12,721,850
May-05	10,276,997	3,234,708	13,511,705
Jun-05	10,801,749	3,456,605	14,258,354
Total	154,309,096	46,167,180	200,476,276

Note: Prepared by the ORS Audit Staff.

DUKE POWER COMPANY
TOTAL BURNED COST (FOSSIL AND NUCLEAR)
APRIL 2004 - JUNE 2005

<u>MONTH</u>	<u>COAL (1)</u>	<u>PERCENT</u>	<u>OIL</u>	<u>PERCENT</u>	<u>GAS</u>	<u>PERCENT</u>	<u>NUCLEAR</u>	<u>PERCENT</u>	<u>TOTAL BURNED COST</u>
	\$	%	\$	%	\$	%	\$	%	\$
Apr-04	62,535,812	84.40%	573,977	0.78%	10,290	0.01%	10,976,761	14.81%	74,096,840
May-04	69,847,160	75.97%	4,722,080	5.14%	4,689,156	5.10%	12,675,576	13.79%	91,933,972
Jun-04	72,098,803	83.43%	767,041	0.89%	344,391	0.40%	13,201,258	15.28%	86,411,493
Jul-04	84,902,358	84.43%	548,306	0.54%	96,715	0.10%	15,009,332	14.93%	100,556,711
Aug-04	79,609,522	82.11%	1,032,062	1.06%	1,064,230	1.10%	15,249,444	15.73%	96,955,258
Sep-04	60,237,200	78.81%	896,304	1.17%	918,277	1.20%	14,378,722	18.81%	76,430,503
Oct-04	63,056,584	85.14%	671,510	0.91%	(1,647,090)	-2.22%	11,980,189	16.17%	74,061,193
Nov-04	56,733,794	81.85%	956,998	1.38%	46,553	0.07%	11,576,183	16.70%	69,313,528
Dec-04	64,279,730	81.24%	1,613,798	2.04%	78,631	0.10%	13,153,173	16.62%	79,125,332
Jan-05	72,335,129	80.67%	1,196,058	1.33%	1,041,624	1.16%	15,091,134	16.83%	89,663,945
Feb-05	69,748,331	83.28%	716,955	0.86%	(521,645)	-0.62%	13,803,309	16.48%	83,746,950
Mar-05	79,668,208	84.68%	956,961	1.02%	563,754	0.60%	12,889,286	13.70%	94,078,209
Apr-05	73,711,639	85.53%	746,694	0.87%	(997,287)	-1.16%	12,721,850	14.76%	86,182,896
May-05	75,966,563	83.17%	1,206,732	1.32%	656,511	0.72%	13,511,705	14.79%	91,341,511
Jun-05	91,847,497	85.62%	826,079	0.77%	343,750	0.32%	14,258,354	13.29%	107,275,680

(1) Includes Emission Allowance Expense

Note: Prepared by the ORS Audit Staff.

**DUKE POWER COMPANY
COST OF FUEL
APRIL 2004 - JUNE 2005**

<u>MONTH</u>	<u>TOTAL COST OF FUEL BURNED</u>	<u>PURCHASED AND INTERCHANGE POWER FUEL COST</u>	<u>FUEL COST RECOVERED INTERSYSTEM SALES</u>	<u>TOTAL FUEL COST</u>
	\$	\$	\$	\$
Apr-04	74,096,840	4,455,979	(13,617,304)	64,935,515
May-04	91,933,972	8,210,875	(8,277,826)	91,867,021
Jun-04	86,411,493	13,226,865	(5,955,670)	93,682,688
Jul-04	100,556,711	4,999,226	(12,070,796)	93,485,141
Aug-04	96,955,258	4,445,050	(9,292,085)	92,108,223
Sep-04	76,430,503	2,520,376	(4,368,264)	74,582,615
Oct-04	74,061,193	2,846,959	(587,915)	76,320,237
Nov-04	69,313,528	3,527,147	(5,091,851)	67,748,824
Dec-04	79,125,332	6,216,262	(7,285,749)	78,055,845
Jan-05	89,663,945	2,113,222	(18,459,543)	73,317,624
Feb-05	83,746,950	1,496,479	(22,807,500)	62,435,929
Mar-05	94,078,209	4,455,426	(20,988,699)	77,544,936
Apr-05	86,182,896	2,191,918	(22,516,237)	65,858,577
May-05	91,341,511	5,298,316	(13,463,183)	83,176,644
Jun-05	107,275,680	2,333,628	(20,671,336)	88,937,972
Total	1,301,174,021	68,337,728	(185,453,958)	1,184,057,791

Note: Prepared by the ORS Audit Staff.

**DUKE POWER COMPANY
FACTOR COMPUTATION
APRIL 2004 - JUNE 2005**

<u>MONTH</u>	<u>TOTAL SYSTEM</u>				
	<u>TOTAL FUEL COSTS</u>	<u>SALES</u>	<u>FUEL COST PER KWH</u>	<u>BASE COST</u>	<u>FUEL ADJUSTMENTS</u>
		<u>EXCLUDING</u>		<u>PER KWH</u>	
		<u>INTERSYSTEM</u>		<u>INCLUDED</u>	
	<u>\$</u>	<u>SALES</u>	<u>SALES</u>	<u>IN RATES</u>	<u>PER KWH</u>
		<u>KWH</u>	<u>\$/KWH</u>	<u>\$/KWH</u>	<u>\$/KWH</u>
Apr-04	64,935,515	6,006,088,000	0.010812	0.011500	0.000688
May-04	91,867,021	5,714,641,000	0.016076	0.011500	(0.004576)
Jun-04	93,682,688	6,981,737,000	0.013418	0.011500	(0.001918)
Jul-04	93,485,141	6,968,944,000	0.013415	0.011500	(0.001915)
Aug-04	92,108,223	7,194,367,000	0.012803	0.011500	(0.001303)
Sep-04	74,582,615	6,977,080,000	0.010690	0.011500	0.000810
Oct-04	76,320,237	5,814,932,000	0.013125	0.011500	(0.001625)
Nov-04	67,748,824	5,819,528,000	0.011642	0.011500	(0.000142)
Dec-04	78,055,845	6,057,959,000	0.012885	0.011500	(0.001385)
Jan-05	73,317,624	6,601,294,000	0.011107	0.011500	0.000393
Feb-05	62,435,929	6,352,976,000	0.009828	0.011500	0.001672
Mar-05	77,544,936	6,360,977,000	0.012191	0.011500	(0.000691)
Apr-05	65,858,577	5,759,869,000	0.011434	0.011500	0.000066
May-05	83,176,644	5,722,160,000	0.014536	0.011500	(0.003036)
Jun-05	88,937,972	6,593,837,000	0.013488	0.011500	(0.001988)

Note: Prepared by the ORS Audit Staff.

Duke Power Company
S.C. Retail Comparison of Fuel Revenues & Expenses
April 2004 - September 2005

Description	ACTUAL									
	Apr-04	May-04	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04	Nov-04	Dec-04	
Fossil Fuel	63,120,079	79,258,396	73,210,235	85,547,379	81,705,814	62,051,781	62,081,004	57,737,345	66,972,159	
Nuclear Fuel	10,976,761	12,675,576	13,201,258	15,009,332	15,249,444	14,378,722	11,980,189	11,576,183	13,153,173	
Purchased Power (2)	4,455,979	8,210,875	13,226,865	4,999,226	4,445,050	2,520,376	2,846,959	3,527,147	6,216,262	
Subtotal	78,552,819	100,144,847	99,638,358	105,555,937	101,400,308	78,950,879	76,908,152	72,840,675	85,341,594	
Less: Fuel Cost Recovered through Intersystem Sales	13,617,304	8,277,826	5,955,670	12,070,796	9,292,085	4,368,264	587,915	5,091,851	7,285,749	
Fuel Cost	64,935,515	91,867,021	93,682,688	93,485,141	92,108,223	74,582,615	76,320,237	67,748,824	78,055,945	
Total System KWH Sales Excluding Intersystem Sales (000's)	6,006,088	5,714,641	6,981,737	6,988,944	7,194,367	6,977,080	5,814,932	5,819,528	6,057,959	
\$/KWH Sales	0.010812	0.016076	0.013418	0.013415	0.012803	0.010690	0.013125	0.011642	0.012885	
Less: Base Sales (\$/KWH)	0.011500	0.011500	0.011500	0.011500	0.011500	0.011500	0.011500	0.011500	0.011500	
Fuel Adjustment Per KWH	0.000688	(0.004576)	(0.001918)	(0.001915)	(0.001303)	0.000810	(0.001625)	(0.000142)	(0.001385)	
S.C. KWH Sales (000's)	1,671,896	1,632,881	1,936,215	1,941,395	2,001,791	1,935,473	1,625,558	1,664,218	1,710,561	
Over/(Under) Recovery	1,150,264	(7,472,063)	(3,713,660)	(3,717,771)	(2,608,334)	1,567,733	(2,641,694)	(236,319)	(2,369,127)	
Cumulative Over/(Under) Recovery-March 2004	11,424,295	(1)								
Accounting Adjustments (3)									6,717,740	
Cumulative Over/(Under) Recovery this Period	12,574,559	5,102,496	1,388,836	(2,328,935)	(4,937,269)	(3,369,536)	(6,011,230)	(6,247,549)	(1,898,936)	

Please Note:

In Audit Exhibit JRC-7, ORS reflects Over-Recovery amounts without parentheses and reflects (Under)-Recovery amounts within parentheses.

* Explanation of Footnotes on Audit Exhibit JRC-7, Page 3 of 4 and Page 4 of 4.

Note: Prepared by the ORS Audit Staff.

Duke Power Company
S.C. Retail Comparison of Fuel Revenues & Expenses
April 2004 - September 2005

Description	ACTUAL				ESTIMATED				ESTIMATED	
	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	
Fossil Fuel (4)	74,572,811	69,943,641	81,188,923	73,461,046	77,829,806	93,017,326	117,291,000	130,761,000	104,111,000	
Nuclear Fuel (6)	15,091,134	13,803,309	12,889,286	12,721,850	13,511,705	14,258,354	3,321,000	16,024,000	13,256,000	
Purchased Power (2)	2,113,222	1,496,479	4,456,426	2,191,918	5,298,316	2,333,628	4,368,000	4,368,000	4,368,000	
Subtotal	91,777,167	85,243,429	98,533,635	88,374,814	96,639,827	109,609,308	124,980,000	150,163,000	121,734,000	
Less: Fuel Cost Recovered through Intersystem Sales	18,459,543	22,807,500	20,988,699	22,516,237	13,463,183	20,671,336	19,752,000	19,752,000	19,752,000	
Fuel Cost	73,317,624	62,435,929	77,644,936	65,858,577	83,176,644	88,937,972	105,228,000	130,401,000	101,982,000	
Total System KWH Sales Excluding Intersystem Sales (000's)	6,601,294	6,352,976	6,360,977	5,759,869	5,722,160	6,593,837	7,719,045	8,083,192	7,335,256	
\$/KWH Sales	0.011107	0.009828	0.012191	0.011434	0.014536	0.013488	0.013632	0.016132	0.013903	
Less: Base Sales (\$/KWH)	0.011500	0.011500	0.011500	0.011500	0.011500	0.011500	0.011500	0.011500	0.011500	
Fuel Adjustment Per KWH	0.000393	0.001672	(0.000691)	0.000066	(0.003036)	(0.001988)	(0.002132)	(0.004632)	(0.002403)	
S.C. KWH Sales (000's)	1,803,088	1,789,530	1,704,461	1,633,990	1,628,822	1,858,972	2,090,800	2,167,462	2,080,211	
Over/(Under) Recovery	708,614	2,992,094	(1,177,783)	107,843	(4,946,104)	(3,695,636)	(4,457,586)	(10,039,684)	(4,998,747)	
Cumulative Over/(Under) Recovery - 12/04 (p.1 of 4)	(1,898,936)									
Accounting Adjustments (3)			(2,697,689)	1,056,943		6,880,008			5,029,850	
Cumulative Over/(Under) Recovery this Period	(1,190,322)	1,801,772	(2,073,700)	(908,914)	(5,854,018)	(2,669,646)	(7,127,232)	(17,166,916)	(17,135,813)	

Please Note:

In Audit Exhibit JRC-7, ORS reflects Over-Recovery amounts without parentheses and reflects (Under)-Recovery amounts within parentheses.

* Explanation of Footnotes on Audit Exhibit JRC-7, Page 3 of 4 and Page 4 of 4.

Note: Prepared by the ORS Audit Staff.

Duke Power Company

S.C. Retail Comparison of Fuel Revenues and Expenses

APRIL 2004 – SEPTEMBER 2005

Explanation of Footnotes to Audit Exhibit JRC-7

- (1) ORS's cumulative over-recovery balance brought forward from March 2004 of \$11,424,295, as reflected on Audit Exhibit JRC-7, is the amount of the cumulative over-recovery balance as of March 2004, as shown on the PSC "Commission Staff Report" (Audit Exhibit G -Page 2 of 4), from Duke Power Company's last fuel review period (actual April 2003 – March 2004), Docket No. 2004-3-E. The Company's beginning cumulative over-recovery balance from March 2004 totals \$12,105,373 per books. This beginning cumulative balance over-recovery difference as of March 2004 between the ORS and the Company totals \$681,078. It should be noted that Duke Power Company, in its testimony in this current case, includes an applicable (under)-recovery adjustment to June 2004's monthly deferred entry, on a rounded basis, of (\$681,000).
- (2) ORS's Purchased Power figures for April 2004 through June 2005 and the resultant over (under)-recovery monthly deferred fuel amounts for April 2004 through June 2005 reflect ORS's verification of the Company's compliance with the revised section of the S.C. Fuel Statute (updated as of February 2004), S.C. Code Ann. §58-27-865(A). This Statute addresses "fuel costs related to purchased power". Sub-section (A)(2)(b) of the revised Statute states that the delivered cost of economy purchases, including transmission charges, could be included in Purchased Power Costs if those types of purchases were proven to be "less than the purchasing utility's avoided variable costs for the generation of an equivalent quantity of electric power". Duke reflects its Purchased Power figures that contain purchases with non-identifiable fuel costs on a N.C. Fuel Clause basis, which uses a percentage-computed fuel proxy. Identifiable fuel costs are reflected as identified. In order to comply with this S.C. revision, Duke adjusts its review period's Purchased Power Costs to reflect the purchase costs allowable under the S.C. Fuel Adjustment Statute. Therefore, after Duke applied this revised Statute to the examined economic purchases along with the applicable avoided costs, Duke's adjustment increased the review period's Purchased Power Costs, on a total system—native load basis (i.e., applicable to native load customers on a total system basis), by \$9,459,687. The ORS also examined the economic purchases along with the applicable avoided costs for the review period. ORS agrees with Duke's increase to Purchased Power Costs, on a total system—native load basis, by \$9,459,687.
- (3) During the review period, the Company made various adjustments to the cumulative balance of the Deferred Fuel Account. The adjustments were as follows:
 - (A) Pursuant to the Public Service Commission's Order No. 2004-603, dated December 9, 2004, Duke requested and it was approved that Duke would change its 2005 S.C. Fuel Review hearing schedule to the last Wednesday in August 2005. Duke was concerned that, because of the extension of its present fuel factor until October 1, 2005, its retail customers would also become concerned about "possible 'rate shock'". Therefore, also

Duke Power Company
S.C. Retail Comparison of Fuel Revenues and Expenses
APRIL 2004 – SEPTEMBER 2005

(3) (Continued)

in this Order, the PSC approved the Company's request to "forgo and write-off the recovery of fuel costs of up to \$16 million" through September 30, 2005. This process would reduce the cumulative balance of the Deferred Fuel Account on a quarterly basis beginning on the date of the Order. The Company's "write-off" adjustments (before the 1.0044 tax factor) were: (a) Dec. 2004-Over-Recovery Adj. -- \$6,717,740; (b) March 2005 – (Under)-Recovery Adj. – (\$2,697,689); (c) June 2005 – Over-Recovery Adj. -- \$6,880,008; and (d) For estimated Sept. 2005 – Over-Recovery Adj. for the balance of the \$16 Million -- \$5,029,850.

(B) In April 2005, the Company made an over-recovery adjustment to the S.C. Deferred Fuel Account for \$1,056,943 to reflect corrections for 2004 and three months of 2005 to Catawba Sales Energy Imbalance amounts.

- (4)** Fossil Fuel Costs for the estimated month of July 2005 include a reduction adjustment to reflect a settlement agreement between Duke Power Company and Norfolk Southern Railway Company. The amount of this adjustment is confidential.
- (5)** Nuclear Fuel Costs for the estimated month of July 2005 include a reduction adjustment to reflect a settlement agreement between Duke Power Company (and eight other utilities) and the Department of Energy (DOE). The amount of this adjustment is confidential.

The Company's cumulative (under)-recovery balance, on a S.C. jurisdictional basis, as of actual June 2005, per its testimony in Docket No. 2005-3-E totals (\$2,670,000). ORS's cumulative (under)-recovery balance, on a S.C. jurisdictional basis, as of actual June 2005 totals (\$2,669,646). The cumulative (under)-recovery balance difference, on a S.C. jurisdictional basis, between the ORS and the Company as of actual June 2005 is (\$354) {\$-0- on a rounded basis}. The Company's cumulative (under)-recovery balance, on a S.C. jurisdictional basis, as of estimated September 2005, per its testimony in Docket No. 2005-3-E totals (\$17,137,000). ORS's cumulative (under)-recovery balance, on a S.C. jurisdictional basis, as of estimated September 2005 totals (\$17,135,813). The cumulative (under)-recovery balance difference, on a S.C. jurisdictional basis, between the ORS and the Company as of estimated September 2005 is (\$1,187) {(\$1,000) on a rounded basis}, which is attributed to a rounding difference.